DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014282

Address: 333 Burma Road **Date Inspected:** 12-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Wu Zhi Chang No Yes N/A **Rod Oven in Use:** Yes No **Inspected CWI report:** No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

Segment # Lift 8 (East)

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray at Panel Point (PP) 61 ~ PP 71 for Segment 8AE ~8CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00346 Dated May 12, 2010

Bolt sizes used were M19 x 55 RC Set# DHG60580 and final torque required was 340 N-m.

Manual Torque wrench was been used with Sr. No. 0900001 Please refer the pictures for more comprehensive detail.

Note: Cable Tray Support (Angle Frame Location) –Except PP 62~PP 62.5 and PP68 ~ PP 68.5 due to sea fastener

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Segment # 9AE, 9AW & 9BW (Cope Weld Access Hole Inspection)

This QA inspector performed visual testing and dimensional check on cope hole and welds access for OBG lift 9 East & 9 West for smoothness & Radius. Below locations not complies with the ABF inspection report no: CWAHIR-9AE-01dated 15th Jan 2010, CWAHIR-9AW-02 dated 7th Jan 2010 and CWAHIR-9BW-01dated 7th Jan 2010. All these details noted and forwarded to team leader for further action.

Segment #8BE~8CE

Repair Welding.

This QA inspector observed ZPMC qualified welding personnel identified as 048659 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE8A-002 and was observed welding in the 3G (Vertical) position; The Critical Welding Repair Report (CWRR) was B-CWR1525. ZPMC CWI is identified as Mr.Liu Huajie. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1

Segment# 8BE

During in process visual inspection of 8BE, This QA Inspector observed ABF personnel, identified as Mr. Zhang Qi LI, performing Ultrasonic Testing (UT) of the Weld connecting Floor Beam to Longitudinal Diaphragm at E4 location.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By: Prabhune, Manoj Quality Assurance Inspector **Reviewed By:** Patterson, Rodney QA Reviewer